

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/573,600
Source: IFw,P
Date Processed by STIC: 4/6/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)**
2. **U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314**

Revised 01/10/06

Raw Sequence Listing Error Summary

| <u>ERROR DETECTED</u> | <u>SUGGESTED CORRECTION</u> | <u>SERIAL NUMBER:</u> <u>10/593,600</u> |
|---|---|---|
| ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE | | |
| 1 <input type="checkbox"/> Wrapped Nucleic Wrapped Aminos | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping." | |
| 2 <input type="checkbox"/> Invalid Line Length | The rules require that a line not exceed 72 characters in length. This includes white spaces. | |
| 3 <input type="checkbox"/> Misaligned Amino Numbering | The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead. | |
| 4 <input type="checkbox"/> Non-ASCII | The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text. | |
| 5 <input type="checkbox"/> Variable Length | Sequence(s) <input type="checkbox"/> contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing. | |
| 6 <input type="checkbox"/> PatentIn 2.0 "bug" | A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <input type="checkbox"/> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences. | |
| 7 <input type="checkbox"/> Skipped Sequences (OLD RULES) | Sequence(s) <input type="checkbox"/> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences. | |
| 8 <input type="checkbox"/> Skipped Sequences (NEW RULES) | Sequence(s) <input type="checkbox"/> missing. If intentional , please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000 | |
| 9 <input type="checkbox"/> Use of n's or Xaa's (NEW RULES) | Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents. | |
| 10 <input type="checkbox"/> Invalid <213> Response | Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below) | |
| 11 <input type="checkbox"/> Use of <220> | Sequence(s) <input type="checkbox"/> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules | |
| 12 <input type="checkbox"/> PatentIn 2.0 "bug" | Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk. | |
| 13 <input type="checkbox"/> Misuse of n/Xaa | "n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u> | |



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/573,600

DATE: 04/06/2006
TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt
Output Set: N:\CRF4\04062006\J573600.raw

3 <110> APPLICANT: The Trustees of the University of Pennsylvania
 4 Wilson, James M.
 5 Gao, Guangping
 6 Alvira, Mauricio R.
 7 Vandenberghe, Luk H.
 9 <120> TITLE OF INVENTION: Adeno-Associated Virus (AAV) Clades, Sequences, Vectors
 10 Containing Same, and Uses Therefor
 12 <130> FILE REFERENCE: UPN-P3230PCT

C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/573,600

C--> 14 <141> CURRENT FILING DATE: 2006-03-24

14 <150> PRIOR APPLICATION NUMBER: US 60/508,226

15 <151> PRIOR FILING DATE: 2003-09-30

17 <160> NUMBER OF SEQ ID NOS: 236

19 <170> SOFTWARE: PatentIn version 3.3

21 <210> SEQ ID NO: 1

22 <211> LENGTH: 2211

23 <212> TYPE: DNA

24 <213> ORGANISM: adeno-associated virus, clone hu.31

26 <400> SEQUENCE: 1

27 atggctgccg atggttatct tccagattgg ctcgaggaca accttagtga aggaattcgc 60
 29 gagttggggg ctttgaacc tgagccccct caacccaagg caaatcaaca acatcaagac 120
 31 aacgctcgag gtcttgctc tccgggttac aaataccttg gacccggcaa cgactcgac 180
 33 aagggggagc cggtaacgc agcagacgcg gcccctcg agcacgacaa ggcctacgac 240
 35 cagcagctca aggccggaga caacccgtac ctcaagtaca accacgcca cggcggatcc 300
 37 caggagccgc tcaaagaaga tacgtctttt ggggcaacc tcggccgagc agtctccag 360
 39 gccaaaaaaa ggcttcttga accttgggt ctgggtgagg aacggctaa gacgctct 420
 41 ggaaaagaaga ggcctgtaga gcagtctcct caggaaccgg actcctccgc ggttattggc 480
 43 aaatcgggtg cacagccgc taaaaagaga ctcaatttcg gtcagactgg cgacacagag 540
 45 tcagtcccag accctcaacc aatcgagaa cctccgcag cccctcagg tgtggatct 600
 47 cttacaatgg cttcaggtgg tggcgacca gtggcagaca ataacgaagg tgccatgg 660
 49 gtggtagtt cctcgaaa ttggcattgc gattccaat gctggggga' cagagtcatc 720
 51 accaccagca cccgaacctg gcccctgccc acctacaaca atcacctcta caagcaaatac 780
 53 tccaaacagca catctggagg atcttcaaat gacaacgcct acttcggcta cagcaccccc 840
 55 tgggggtatt ttgacttcaa cagattccac tgccacttct caccacgtga ctggcagcga 900
 57 ctcataaca acaactggg attccggcct aagcgactca acttcaagct cttcaacatt 960
 59 cagtc当地 aggttacgga caacaatggg gtcaagacca tcgccaataa cttaccagc 1020
 61 acgttccagg tcttcacgga ctcagactat cagctccgt acgtgctcggt tcggctcac 1080
 63 gagggctgcc tccccgcgtt cccagccggac gttttcatga ttcctcagta cgggtatctg 1140
 65 acgttaatg atggaaagcca gcccgtgggt cgttcgtcct tttactgcct ggaatatttc 1200
 67 ccgtcgaaa tgctaaagaaac ggttaacaac ttccagttca gctacgagg tgagaacgta 1260
 69 ctttccata gcagctacgc tcacagccaa agcctggacc gactaatgaa tccactcatc 1320
 71 gaccaataact tgtactatct ctcaaagact attaacgggtt ctggacagaaa tcaacaaacg 1380
 73 ctaaaattca gtgtggccgg acccagcaac atggctgtcc agggaaagaaa ctacataacct 1440

ppr 1-5
Does Not Comply
Corrected Diskette Needed

invalid 2237 response

*see item 10 on Env
summary*

Next

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/573,600

DATE: 04/06/2006
TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt
Output Set: N:\CRF4\04062006\J573600.raw

| | | |
|----|--|------|
| 75 | ggacccagct accgacaaca acgtgtctca accactgtga ctcaaaaaca caacagcgaa | 1500 |
| 77 | tttgcttggc ctggagcttc ttcttgggct ctcaatggac gtaatagctt gatgaatcct | 1560 |
| 79 | ggacctgcta tggccagcca caaagaagga gaggaccgtt tcttccttt gtctggatct | 1620 |
| 81 | ttaattttg gcaaacaagg aacttggaga gacaacgtgg atgcggacaa agtcatgata | 1680 |
| 83 | accaacgaag aagaaattaa aactactaac ccggtagcaa cggagtccctt tggacaagtg | 1740 |
| 85 | gccacaaaacc accagagtgc ccaaggcacag gcgcagaccc gctgggttca aaacaagga | 1800 |
| 87 | atacttccgg gtatggtttgcaggacaga gatgtgtacc tgcaaggacc catttggcc | 1860 |
| 89 | aaaatttcctc acacggacgg caactttcac ctttcctc tgatgggagg gtttggatg | 1920 |
| 91 | aagcacccgc ctccatcgat cctcatcaaa aacacacctg tacctgcgga tcctccaacg | 1980 |
| 93 | gccttcaaca aggacaagct gaactcttc atcaccctgtt attctactgg ccaagtccgc | 2040 |
| 95 | gtggagatcg agtgggagct gcagaaggaa aacagcaagc gctggAACCC ggagatccag | 2100 |
| 97 | tacacttcca actattacaa gcttaataat gttgaatttgcgttataac tgaagggtgt | 2160 |
| 99 | tatagtgaac cccccccat tggcaccaga tacctgactc gtaatctgt a | 2211 |

102 <210> SEQ ID NO: 2

103 <211> LENGTH: 2211

104 <212> TYPE: DNA

105 <213> ORGANISM: new AAV serotype, clone hu.32

same env

107 <400> SEQUENCE: 2

| | | |
|-----|--|------|
| 108 | atggctgccc atggtatct tccagattgg ctcgaggaca ctctctctga aggaataaga | 60 |
| 110 | cagtgggta agctcaaacc tggcccacca ccaccaaacc ccgcagacgc gcataaggac | 120 |
| 112 | gacagcagggt gtcttgcgtt ccctgggtac aagtacctcg gacccggcaaa cgactcgac | 180 |
| 114 | aaggggggaggc cggtaaacgc agcagacgcg gcccctcg agcacgacaa ggcctacgc | 240 |
| 116 | cagcagctca aggccggaga caacccgtac ctcaagtaca accacgcccga cgccgagttc | 300 |
| 118 | caggagcggc tcaaagaaga tacgtctttt gggggcaacc tcggcgagc agtctccag | 360 |
| 120 | gccaaaaaaa ggcttcttgc acctcttggt ctgggtgagg aagcggctaa gacggctcct | 420 |
| 122 | ggaaaagaaga ggcctgtaga gcagtctct caggaaccgg actcctccgc ggttattggc | 480 |
| 124 | aaatcggtt cacagccgc taaaaagaaa ctcaatttcg gtcagactgg cgacacagag | 540 |
| 126 | tcagcccccg accctcaacc aatcgagaa cctcccgccg cccctcagg tggatct | 600 |
| 128 | cttacaatgg cttcagggtgg tggcgacca gtggcagaca ataacgaagg tgccatgg | 660 |
| 130 | gtgggttgtt cctcggaaa ttggcattgc gattccaat ggctggggga cagactcatc | 720 |
| 132 | accaccagca cccgaacctg gcccctgcac acctacaaca atcaccctta caagcaaacc | 780 |
| 134 | tccaacagca catctggagg atcttcaaaat gacaacgcct acttcggcta cagcaccccc | 840 |
| 136 | tgggggtatt ttgacttcaa cagattccac tgccacttct caccacgtga ctggcagcga | 900 |
| 138 | ctcatcaaca acaactgggg attccggcct aagcactca acttcaagct ctcaacatt | 960 |
| 140 | caggtcaaag aggttacgga caacaatggc gtcaagacca tcgccaataa cttaccagc | 1020 |
| 142 | acgggtccagg tcttacggc ctcagactat cagctccgt acgtgctcgg gtcggctcac | 1080 |
| 144 | gagggtctgcc tcccgccgtt cccagccggac gtttcatga ttccctcaga cggtatctg | 1140 |
| 146 | acgcttaatg atgggagcca ggccgtgggt cgttcgtctt ttactgcct ggaatatttc | 1200 |
| 148 | cgtcgcaaa tgctaaagaac ggttacaac ttccagttca gctacgagtt tgagaacgta | 1260 |
| 150 | ccttcata gcaatcgcc tcacagccaa agcctggacc gactaatgaa tccactcatc | 1320 |
| 152 | gaccaataact tgtactatct ctcaaaagact attaacgggtt ctggacagaa tcaacaaacg | 1380 |
| 154 | ctaaaattca gcgtggccgg acccagcaac atggctgtcc agggaaagaaa ctacatacct | 1440 |
| 156 | ggacccagct accgacaaca acgtgtctca accactgtga ctcaaaaaca caacagcgaa | 1500 |
| 158 | tttgcttggc ctggagcttc ttcttgggct ctcaatggac gtaatagctt gatgaatcct | 1560 |
| 160 | ggacctgcta tggccagcca caaagaagga gaggaccgtt tcttccttt gtctggatct | 1620 |
| 162 | ttaattttg gcaaacaagg aacttggaga gacaacgtgg atgcggacaa agtcatgata | 1680 |
| 164 | accaacgaag aagaaattaa aactactaac ccggtagcaa cggagtccctt tggacaagtg | 1740 |
| 166 | gccacaaaacc accagagtgc ccaaggcacag gcgcagaccc gctgggttca aaaccaagga | 1800 |
| 168 | atacttccgg gtatggtttgcaggacaga gatgtgtacc tgcaaggacc catttggcc | 1860 |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/573,600

DATE: 04/06/2006
TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt
Output Set: N:\CRF4\04062006\J573600.raw

| | | |
|-----|---|-------------|
| 170 | aaaattcctc acacggacgg caacttcac ctttccgc taatggagg gtttggatg | 1920 |
| 172 | aagcacccgc ctccatcgat cctcatcaa aacacacctg tacctgcgga tcctccaacg | 1980 |
| 174 | gtcttcata aggacaagct gaactttc atcaccctg attctactgg ccaagtccagc | 2040 |
| 176 | gtggagattt agtggagact gcagaaggaa aacagcaagc gctggAACCC ggagatccag | 2100 |
| 178 | tacacttcca actattacaa gtctaataat gttgaatttg ctgttaatac tgaaggtgta | 2160 |
| 180 | tatagtgaac cccgccccat tggcaccaga tacctgactc gtaatctgta a | 2211 |
| 183 | <210> SEQ ID NO: 3 | |
| 184 | <211> LENGTH: 2211 | |
| 185 | <212> TYPE: DNA | |
| 186 | <213> ORGANISM: adeno-associated virus, human clone 9 | <i>None</i> |
| 188 | <400> SEQUENCE: 3 | |
| 189 | atggctgcgc atggtatct tccagattgg ctcgaggaca accttagtga aggaattcgc | 60 |
| 191 | gagtggggg ctttggaaacc tggagccctt caacccaagg caaatcaaca acatcaagac | 120 |
| 193 | aacgctcgag gtcttgcgt tccgggttac aaatacctt gacccggcaa cggactcgac | 180 |
| 195 | aaggggggagc cggtaaacgc agcagacgcg gcccctcg agcacgacaa ggcttacgac | 240 |
| 197 | cagcagctca aggccggaga caacccgtac ctcaagtaca accacgcccga cgccgagttc | 300 |
| 199 | caggagccgc tcaaagaaga tacgtcttt gggggcaacc tcggcggagc agtcttccag | 360 |
| 201 | gccaaggaa ggccttcttga acctcttggt ctgggttggg aagcggctaa gacggcttctt | 420 |
| 203 | ggaaagaaga ggcctgtaga gcagtctctt caggaaccgg actcctccgc gggatttggc | 480 |
| 205 | aaatcggtt cacagccgc taaaaagaga ctcaatttcg gtcagactgg cgacacagag | 540 |
| 207 | tcaagtccca accctcaacc aatcgagaa cctcccgac cccctcaagg tggggatct | 600 |
| 209 | tttacaatgg ctcaagggttgg tggcgcacca gtggcagaca ataacgaagg tgccatgg | 660 |
| 211 | gtgggttagtt ctcggggaaa ttggcattgc gattccaat ggctgggggaa cagagtcatc | 720 |
| 213 | accaccagca cccgaacctg ggccctgcac acctacaaca atcaccctta caagcaaattc | 780 |
| 215 | tccaaacagca catctggagg atcttcaaat gacaacgcct acttcggcta cagcaccccc | 840 |
| 217 | tgggggtatt ttgacttcaa cagattccac tgccacttctt caccacgtga ctggcagcga | 900 |
| 219 | ctcatcaaca acaactgggg attccggctt aagcactca acttcagact cttaacatt | 960 |
| 221 | caggtaaaag aggttacggc caacaatggc gtcaagacca tcgccaataa ctttaccagc | 1020 |
| 223 | acgggtccagg ttccatcggtt ctcagactat cagctccgt acgtgctcg gtcggctcac | 1080 |
| 225 | gagggtctgc tccggcggtt cccagccggac gtttcatga ttccctagta cgggtatctg | 1140 |
| 227 | acgttaatg atggaagcca ggccgtgggt cgttctgttctt tttactgcctt ggaatatttc | 1200 |
| 229 | ccgtcgcaaa tgctaagaac gggtaacaac ttccagttca gctacgagtt tgagaacgt | 1260 |
| 231 | cctttccata gcagctacgc tcacagccaa agcctggacc gactaatgaa tccactcatc | 1320 |
| 233 | gaccaataact tgtactatct ctcaaaagact attaacggtt ctggacagaa tcaacaaacg | 1380 |
| 235 | ctaaaattca gtgtggccgg acccagcaac atggctgtcc agggaaagaaa ctacatacct | 1440 |
| 237 | ggacccagct accgacaaca acgtgtctca accactgtga ctcaaaacaa caacagcgaa | 1500 |
| 239 | tttgcgttgc ctggagcttc ttcttgggtt ctcaatggac gtaatagtt gatgaatctt | 1560 |
| 241 | ggacctgcta tggccagcca caaagaagga gaggaccgtt tctttccctt gtctggatct | 1620 |
| 243 | ttaatttttgc gcaacaagg aactggaaa gacaacgtgg atgcggacaa agtcatgata | 1680 |
| 245 | accaacgaag aagaaattaa aactactaac ccgttagcaa cggagtctta tggacaagt | 1740 |
| 247 | gcccacaaacc accagagtgc ccaagcacag ggcacacccg gctgggttca aaaccaagg | 1800 |
| 249 | atacttcgg gtatggtttgc agggacaga gatgtgtacc tgcaaggacc catttggggcc | 1860 |
| 251 | aaaattcctc acacggacgg caacttcac ctttccgc tgatggagg gtttggatg | 1920 |
| 253 | aagcacccgc ctccatcgat cctcatcaa aacacacctg tacctgcgga tcctccaacg | 1980 |
| 255 | gccttcacaaggc aggacaagct gaactttc atcaccctg attctactgg ccaagtccagc | 2040 |
| 257 | gtggagatcg agtggagact gcagaaggaa aacagcaagc gctggAACCC ggagatccag | 2100 |
| 259 | tacacttcca actattacaa gtctaataat gttgaatttg ctgttaatac tgaaggtgta | 2160 |
| 261 | tatagtgaac cccgccccat tggcaccaga tacctgactc gtaatctgta a | 2211 |
| 264 | <210> SEQ ID NO: 4 | |

RAW SEQUENCE LISTING
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Input Set : A:\UPN-P3230-sequence listing.txt
Output Set: N:\CRF4\04062006\J573600.raw

265 <211> LENGTH: 2217
 266 <212> TYPE: DNA
 267 <213> ORGANISM: new AAV serotype, clone hu.17
 269 <400> SEQUENCE: 4

| | | | | | | |
|-----------------|-------------|------------------------------|------------|-------------|------------|------|
| 270 atggctgccg | atggtatct | tccagattgg | ctcgaggaca | acctctctga | gggcattcgc | 60 |
| 272 gagtgggg | acttcaaacc | tggagccccg | aaacccaaag | ccaaccagca | aaagcaggac | 120 |
| 274 gacggccggg | gtctggct | tcctggctgc | aagtacctcg | gacccttcaa | cggactcgac | 180 |
| 276 aagggggagc | ccgtcaacgc | ggcgacgca | gcggccctcg | agcacgacaa | ggcctacgac | 240 |
| 278 cagcagctca | aagcgggtga | caatccgtac | ctgcggata | accacgcga | cgcgagtt | 300 |
| 280 caggagcgtc | tgcaagaaga | tacgtcttt | ggggcaacc | tcggggagc | agtcttccag | 360 |
| 282 gccaagaagc | gggttctcg | acctctcggt | ctgggtgagg | aaggcgctaa | gacggctct | 420 |
| 284 gaaaagaaga | gaccgtaga | gccatcaccc | cagcgttctc | cagactcctc | tacgggcac | 480 |
| 286 gccaagacag | gccagcagcc | cgcgaaaaag | agactcaact | ttgggcagac | tggcactca | 540 |
| 288 gagtcaagtgc | ccgaccctca | accaatcgga | gaacccccc | caggccctc | tggctggga | 600 |
| 290 tctggtacaa | tggctgcagg | cggtggcgct | ccaatggcag | acaataacga | aggcggcag | 660 |
| 292 ggagtgggta | gttcctcagg | aaattggcat | tgcgattcca | catggctggg | cgacagagtc | 720 |
| 294 atcaccacca | gcacccgaac | ctggggccctc | cccacctaca | acaaccacct | ctacaagcaa | 780 |
| 296 atctccaacg | ggacatcg | aggaagcacc | aacgacaaca | cctacttcg | ctacagcacc | 840 |
| 298 ccctgggggt | attttactt | taacagattc | cactgccc | tctcaccac | tgactggcag | 900 |
| 300 cgactcatca | acaacaactg | gggattccgg | cccaagagac | tcaacttcaa | gctcttcaac | 960 |
| 302 atccaggtca | aggaggtcac | gcagaatgaa | ggcaccaaga | ccatcgccaa | taaccttacc | 1020 |
| 304 agcacgattc | aggtctttac | ggactcgaa | taccagctcc | cgtacgttct | cggctctgcg | 1080 |
| 306 caccagggtc | gcccgcctcc | gttccggcg | gacgtcttca | tgattcctca | gtacgggtac | 1140 |
| 308 ctgactctga | acaacggcag | tcaggccgt | ggccgttct | ccttctactg | cctggagtag | 1200 |
| 310 ttcccttctc | aaatgcggag | aacgggcaac | aactttgagt | tcaagctacca | gttgaggac | 1260 |
| 312 gtgccttttc | acagcagcta | cgcgcata | caaagcctgg | accggctgtat | gaacccccc | 1320 |
| 314 atcgaccagt | acctgtacta | cctgtctcg | actcagtcc | cgggaggtac | cgcaggaact | 1380 |
| 316 cagcagttgc | tatttctca | ggccgggc | aataacatgt | cggctcaggc | aaaaaactgg | 1440 |
| 318 ctacccgggc | cctgctacc | gcagcaacgc | gtctccacga | cactgtcgca | aaataacaac | 1500 |
| 320 agcaacttt | cttggaccgg | tgccacca | tatcatctga | atggcagaga | ctctctggta | 1560 |
| 322 aatcccggtg | tcgctatggc | aacgcaca | gacgacga | agcgatttt | tccatccagc | 1620 |
| 324 ggagtcttga | tgttggaa | acagggagct | ggaaaagaca | acgtggacta | tagcagcgtt | 1680 |
| 326 atgctaacca | gtgagaaga | aatcaaaaacc | accaaccag | tggccacaga | acagtacggc | 1740 |
| 328 gtgtggccg | ataacctgca | acagaaaaac | gccgctc | ttgttagggc | cgtcaacagt | 1800 |
| 330 caaggagct | tacctggcat | gtctggcag | aacggggac | tgtacctgca | gggtcctatc | 1860 |
| 332 tgggccaaga | ttccctcacac | ggacggcaac | tttcatc | cggcgtat | gggaggctt | 1920 |
| 334 ggactgaaac | acccgcctcc | tca | attaa | cacctgttcc | cggatc | 1980 |
| 336 ccaactac | tcagtc | caagctggcg | tcgttcatca | cgcagtac | cacggac | 2040 |
| 338 gtcagcgtgg | aaattgaatg | ggagctgc | aaagagaaca | gcaagcgt | gaacccagag | 2100 |
| 340 attcagtata | cttccaa | taacaaatct | gttaatgtgg | actttactgt | ggacactaat | 2160 |
| 342 ggtgttatt | cagacc | ccccattggc | accagata | tgactcgta | tctgtaa | 2217 |
| 345 <210> | SEQ ID NO: | 5 | | | | |
| 346 <211> | LENGTH: | 2217 | | | | |
| 347 <212> | TYPE: | DNA | | | | |
| 348 <213> | ORGANISM: | new AAV serotype, clone hu.6 | | | | |
| 350 <400> | SEQUENCE: | 5 | | | | |
| 351 atggctgccg | atggtatct | tccagattgg | ctcgaggaca | acctctctga | gggcattcgc | 60 |
| 353 gagtgggg | acttcaaacc | tggagccccg | aaacccaaag | ccaaccagca | aaagcaggac | 120 |
| 355 gacggccggg | gtctggct | tcctggctac | aagtacctcg | gacccttcaa | cggactcgac | 180 |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/573,600

DATE: 04/06/2006
TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt
Output Set: N:\CRF4\04062006\J573600.raw

| | | | | | | | |
|-----|-------------|-------------|-------------------------------|-------------|-------------|--------------|------|
| 357 | aagggggagc | ccgtcaacgc | ggcggacgca | gcggccctcg | agcacgacaa | ggcctacgac | 240 |
| 359 | cagcagctca | aagcgggtga | aatccgtac | ctgcggtata | accacgcccga | cgccgagttt | 300 |
| 361 | caggagcgtc | tgcaagaaga | tacgtcttt | ggggcaacc | tcgggcgagc | agtcttccag | 360 |
| 363 | gccaagaagc | gggttctcgta | acctctcggt | ctgggtgagg | aaggcgctaa | gacggctcct | 420 |
| 365 | ggaaagaaga | gaccggtaga | gccatcaccc | cagcgttctc | cagactcctc | tacgggcattc | 480 |
| 367 | ggcaagacag | gccagcagcc | cgcggaaaag | agactcaact | ttgggcagac | tggcgactca | 540 |
| 369 | gagtcagtgc | ccgaccctca | accaatcgga | gaaccccccgg | caggcccctc | tggtctggga | 600 |
| 371 | tctggtacaa | tggctgcagg | cggtggcgct | ccaatggcag | acaataacga | aggcgccgac | 660 |
| 373 | ggagtgggt | gttcotcagg | aaattggcat | tgcgattccg | catggctggg | cgacagagtc | 720 |
| 375 | atcaccacca | gcacccgacc | ctggggccctc | cccacctaca | acaaccacct | ctacaagcaa | 780 |
| 377 | atctccaacg | ggacatcggg | aggaagcacc | aacgacaaca | cctacttcgg | ctacagcacc | 840 |
| 379 | ccctgggggt | atttgactt | taacagattc | cactgcccact | tctcaccacg | tgactggcag | 900 |
| 381 | cgactcatca | acaacaactg | gggattccgg | cccaagagac | tcaacttcaa | gctttcaac | 960 |
| 383 | atccaggtca | aggaggtcac | gcagaatgaa | ggcaccaaga | ccatcgccaa | taaccttacc | 1020 |
| 385 | agcacgattc | aggtctttac | ggactcgaaa | taccagctcc | cgtacgtcct | cggtctcg | 1080 |
| 387 | caccagggt | gccccctcc | gttcccgccg | gacgtcttca | tgattccctca | gtacgggtac | 1140 |
| 389 | ctgactctga | acaacggcag | tcaggccgtg | ggccgttct | ccttctactg | cctggagttac | 1200 |
| 391 | tttccttctc | aaatgcggag | aacgggcaac | aactttgagt | tcagctacca | gttgaggac | 1260 |
| 393 | gtgccttttc | acagoagcta | cgcgcatagc | caaagcctgg | accggctgtat | gaaccccccctc | 1320 |
| 395 | atcgaccagt | acctgtacta | cctgtctcg | actcagtccaa | cgggaggtac | cgcaaggaact | 1380 |
| 397 | cagcagttgc | tatttctca | ggccgggcct | aataacatgt | cggctcaggc | aaaaactgg | 1440 |
| 399 | ctacccgggc | cctgttaccg | gcagcaacgc | gtctccacga | cactgtcgca | aaataacaac | 1500 |
| 401 | agcaactttg | cttggaccgg | tgccaccaag | tatcatctga | atggcagaga | ctctctggta | 1560 |
| 403 | aatcccggt | tcgctatggc | aacgcacaag | gacgacgaag | agcgattttt | tccatccagc | 1620 |
| 405 | ggagtcttga | tgttggaa | acagggagct | ggaaaagaca | acgtggacta | tagcagcgtt | 1680 |
| 407 | atgctaacc | gtgaggaaga | aatcaaaaacc | accaacccag | tggccacaga | acagtacggc | 1740 |
| 409 | gtgggtggccg | ataacactgca | acagaaaaac | gccgctccta | ttgttagggc | cgtcaacagt | 1800 |
| 411 | caaggagcc | tacctggcat | ggtctggcag | aaccgggacg | tgtacctgca | gggtcctatc | 1860 |
| 413 | tgggccaaga | ttcctcacac | ggacggcaac | tttcatcctt | cggcgtcgat | gggaggctt | 1920 |
| 415 | ggactgaaac | acccgcctcc | ttagatccgt | attaagaata | cacctgttcc | cgccgatcct | 1980 |
| 417 | ccaaactac | tcagtcaagc | caagctggcg | tcgttcatca | cgcagtacag | caccggacag | 2040 |
| 419 | gtcagcgtgg | aaattgaatg | ggagctgcag | aaagagaaca | gcaagcgctg | gaacccagag | 2100 |
| 421 | attcagtata | tttccaaacta | ctacaaatct | acaaatgtgg | actttgtgt | caataactgag | 2160 |
| 423 | ggtacttatt | cagaggcctcg | ccccattggc | acccgttacc | tcacccgtaa | cctgtaa | 2217 |
| 426 | <210> | SEQ ID NO: | 6 | | | | |
| 427 | <211> | LENGTH: | 2217 | | | | |
| 428 | <212> | TYPE: | DNA | | | | |
| 429 | <213> | ORGANISM: | new AAV serotype, clone hu.41 | | | | |
| 431 | <400> | SEQUENCE: | 6 | | | | |
| 432 | atggctgctg | acggttatct | tccagattgg | ctcgaggaca | acctctctga | ggcattcgc | 60 |
| 434 | gagtgggtgg | acctgaaacc | tggagccccc | aagcccaagg | ccaaaccagca | gaagcaggac | 120 |
| 436 | gacggccggg | gtctggct | tcctggctac | aagtacccgt | gacccttcaa | cgactcgac | 180 |
| 438 | aagggggagc | ccgtcaacgc | ggcggacgca | gcggccctcg | agcacgacaa | ggcctacgac | 240 |
| 440 | cagcagctca | aagcgggtga | aatccgtac | ctgcggtata | accacgcccga | cgccgagttt | 300 |
| 442 | caggagcgtc | tacaagaaga | tacgtctttt | ggggcaacc | tcgggcgagc | agtcttccag | 360 |
| 444 | gccaagaagc | gggttctcg | acctctcggt | ccgggtgagg | aagctgtcaa | gacggctcct | 420 |
| 446 | ggaaagaaga | gaccggtaga | accgcccact | cagcgttccc | ccgactcctc | cacgggcattc | 480 |
| 448 | gccaagaaag | gccagcagcc | cgctaaaaag | agactgaact | ttggtcagac | tggcgactca | 540 |
| 450 | gagtcagtcc | ccgaccctca | accaatcgga | gaaccaccag | caggcccctc | tggtctggga | 600 |

Please
correct
this
type I
error in
subsequent
sequencer

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/573,600

DATE: 04/06/2006

TIME: 10:49:36

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date